

Federal Personal Income Tax Liabilities and Payments, 1959–97

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THIS ARTICLE presents estimates of Federal personal income tax liabilities and estimates of Federal personal income tax payments for 1959–97 (table 1).¹ The estimates reflect the in-

1. The estimates of Federal personal income tax liabilities for 1997 are new, and the estimates for 1959–96 are revised. The previously published estimates of Federal personal income tax liabilities for 1959–92 appeared in the *August 1996 SURVEY OF CURRENT BUSINESS*; those for 1993–94, in the *December 1997 SURVEY*; and those for 1995–96 in the *December 1998 SURVEY*. The quarterly series for

corporation of the results of the comprehensive revision of the national income and product accounts (NIPA's) that was released in October 1999 and newly available tax return data for 1997 from the Internal Revenue Service (IRS).²

The first section of the article discusses the payments series, the derivation and the use of the estimates of tax liabilities, and the sources of the differences between liabilities and payments. The second section discusses the sources of the differences for selected years, and the third section discusses the sources of the revisions to the estimates for 1959–96.

Payments and liabilities

In the NIPA's, Federal personal income tax payments consist of three components: Withheld income taxes; declarations and settlements, or "nonwithheld" taxes; and refunds.³

Federal Personal Income Tax Payments, 1995–97

(Billions of dollars)

	1995	1996	1997
Federal personal income taxes	585.6	662.9	743.1
Withheld	501.6	548.6	595.1
Declarations and settlements	169.9	203.6	241.8
Less: Refunds	85.9	89.3	93.8

Withheld income taxes are those withheld at the source of the income, mainly on wage and salary income. Declarations are estimated tax payments,

liabilities for 1959–97 is available on request; for information, write to the Government Division (BE–57), Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230.

2. For more information on the comprehensive revision, see Brent R. Moulton, Robert P. Parker, and Eugene Seskin, "A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes," SURVEY 79 (August 1999): 11–12 and Eugene P. Seskin, "Improved Estimates of the National Income and Product Accounts for 1959–98: Results of the Comprehensive Revision," SURVEY 79 (December 1999): 15–43. For tax return data for 1997, see Internal Revenue Service, *Statistics of Income Bulletin* (Washington, DC: U.S. Government Printing Office, Fall 1999). For tax return data for prior years, see *Statistics of Income—Individual Income Tax Returns*.

3. The estimates of these components are published annually in NIPA table 3.4, most recently on page 68 in the December 1999 SURVEY. Quarterly estimates of Federal personal income taxes are published monthly in NIPA table 3.2 in the section "BEA Current and Historical Data." Estimates for earlier periods are available on the BEA Web site at <www.bea.doc.gov> and on the STAT-USA Web site at <www.stat-usa.gov>.

Table 1.—Federal Personal Income Tax Liabilities and Payments, 1959–97

(Billions of dollars)

	Federal personal income taxes			Disposable personal income (DPI)	
	Liabilities basis ¹	Payments basis ²	Difference	Alternative DPI with NIPA Federal personal income taxes on a liabilities basis	Published DPI with NIPA Federal personal income taxes on a payments basis ³
1959	39.0	38.5	0.5	350.7	351.2
1960	39.9	41.8	-1.9	368.1	366.2
1961	42.7	42.7	.0	382.3	382.4
1962	45.4	46.5	-1.1	406.8	405.6
1963	48.8	49.1	-.3	426.2	425.8
1964	47.8	46.0	1.8	461.2	463.0
1965	50.2	51.1	-.9	499.8	498.9
1966	56.8	58.6	-1.8	540.9	539.1
1967	63.7	64.4	-.7	576.9	576.2
1968	77.5	76.4	1.1	625.1	626.2
1969	87.4	91.7	-4.3	679.3	675.0
1970	84.5	88.9	-4.4	740.9	736.5
1971	86.1	85.8	.3	801.4	801.7
1972	94.3	102.8	-8.5	877.0	868.6
1973	108.9	109.6	-.7	979.6	979.0
1974	124.4	126.5	-2.1	1,074.3	1,072.3
1975	117.3	120.7	-3.4	1,184.9	1,181.4
1976	142.8	141.2	1.6	1,298.3	1,299.9
1977	161.0	162.2	-1.2	1,437.1	1,436.0
1978	189.6	188.9	.7	1,614.1	1,614.8
1979	216.1	224.6	-8.5	1,816.8	1,808.2
1980	252.3	250.0	2.3	2,017.4	2,019.8
1981	286.7	290.6	-3.9	2,251.8	2,247.9
1982	280.2	295.0	-14.8	2,421.5	2,406.8
1983	277.8	286.2	-8.4	2,594.4	2,586.0
1984	306.7	301.4	5.3	2,882.3	2,887.6
1985	331.5	336.0	-4.5	3,091.0	3,086.5
1986	374.9	350.1	24.8	3,237.7	3,262.5
1987	378.7	392.5	-13.8	3,473.3	3,459.5
1988	422.0	402.9	19.1	3,733.3	3,752.4
1989	440.0	451.5	-11.5	4,027.7	4,016.3
1990	453.4	470.2	-16.8	4,310.4	4,293.6
1991	455.4	461.3	-5.9	4,480.7	4,474.8
1992	483.1	475.3	7.8	4,746.8	4,754.6
1993	508.5	505.4	3.1	4,932.2	4,935.3
1994	540.3	542.5	-2.2	5,167.7	5,165.4
1995	592.9	585.6	7.3	5,415.2	5,422.6
1996	664.5	662.9	1.6	5,676.2	5,677.7
1997	740.8	743.1	-2.3	5,985.1	5,982.8

1. This series is derived by the Bureau of Economic Analysis and is based on data from *Statistics of Income, Individual Income Tax Returns*.

2. This series is presented in NIPA table 3.2 in the section "BEA Current and Historical Data" of the SURVEY OF CURRENT BUSINESS. All the estimates are available on the BEA Web site at <www.bea.doc.gov> and on the STAT-USA Web site at <www.stat-usa.gov>.

3. This series is presented in NIPA table 2.1 in "BEA Current and Historical Data." See also the BEA Web site. NIPA National income and product account

mostly on income that is not subject to withholding, such as capital gains and self-employment income; settlements are additional taxes that are paid when tax returns are filed or as the result of audits. Refunds of excess payments are recorded as negatives in the payments series when the refunds are made.

For certain analyses, payments data may not be the most appropriate basis of measurement. For example, households may base their consumption decisions, especially about major purchases, on disposable income that is calculated net of expected tax liabilities rather than net of actual tax payments. As a result, liabilities may be the more appropriate basis for analyzing the impact of taxes on consumption.

BEA estimates of Federal personal income tax liabilities are derived primarily from the estimates of "total income tax" from the IRS's *Statistics of Income: Individual Income Tax Returns (SOI)*. *SOI* estimates of total income tax are the sum of income tax after credits, including a portion of the earned income tax credit, and the alternative minimum tax. The *SOI* estimates are adjusted so that the coverage of the liabilities series is comparable with that of the NIPA payments series.⁴ The data for these adjustments are from *SOI* and related publications and from the *IRS Data Book*.

The *SOI* estimates are raised by the addition of recapture taxes from the recomputation of investment, low-income housing, and other tax credits for the prior year; assessment from audits, net of refunds on amended returns (Form 1040X); and fiduciary income taxes.

The *SOI* estimates are reduced by the portion of the earned income credit that is used to offset social security and penalty taxes and by income taxes paid by U.S. citizens living abroad for 1 year or more. In the NIPAs, these citizens are considered residents of foreign countries.

The following paragraphs identify the sources of differences between liabilities and payments, for income that is subject to withholding and income that is not subject to withholding.

Income subject to withholding.—In the Internal Revenue Code, three types of withholding are provided—mandatory, optional, and backup.

4. The NIPA estimates of personal income taxes are derived primarily from financial statements of the Federal Government. BEA begins with the combined income and social security taxes, which are collected together. First, a timing adjustment is made to the combined collections; and then the social security tax portion is subtracted based on a tabulation of employment tax returns from the Social Security Administration. Other adjustments are also made, such as the elimination of interest charges on late taxes and of taxes paid by residences of foreign countries.

Mandatory withholding applies to most wages and salaries, military retirement pay, supplemental wages, and certain other incomes, such as gambling winnings. For wages and salaries, liabilities differ from payments for several reasons. The most important reason is that the withholding tables that are issued by the IRS and that are used by employers to calculate the amounts to be withheld on wages and salaries are based on two simplifying assumptions.

The first assumption is that taxpayers use the standard deduction in calculating their income tax liabilities. However, taxpayers who itemize their deductions may be overwithheld if they underestimate the number of additional withholding allowances that are necessary to offset the excess of their estimated itemized deductions over the standard deduction.⁵ The second assumption is that each taxpayer's wages are constant throughout the year, so overwithholding may result if wages vary widely within the year and are therefore subject to varying withholding rates. In addition, overwithholding may result from the use of withholding for "forced savings" or from the failure to estimate growth in itemized deductions.

Overwithholding may also result when withholding for certain payments is based on flat rates rather than on the withholding-table rates. For example, at the option of an employer, withholding may be based on a flat 28 percent for supplemental wages (such as bonuses, commissions, and overtime pay) and on a flat 20 percent for taxable fringe benefits (such as company cars provided to employees and free or discounted commercial flights). For certain gambling winnings of more than \$5,000, withholding must be at a flat 28 percent.

When tax laws change, changes to withholding tables may differ from changes to liabilities either by timing or by amounts. Tax law provisions are usually effective on January 1, but the withholding tables are sometimes updated later.⁶ The withholding tables are usually updated to reflect changes in the standard deduction, exemptions, and tax rates, but they are not updated to

5. Employees must fill out "Employee's Withholding Allowance Certificate" (Form W-4) so that their employers can withhold Federal income tax from their pay. Employees determine the number of withholding allowances based on estimated itemized deductions, on estimated adjustments to gross income, on the number of personal and dependency exemptions, and on filing status. Employees may submit new Form W-4's at any time to change the number of withholding allowances. These options provide them with some discretion over the effective rates at which taxes are withheld from their incomes.

6. For example, in August 1993, the Omnibus Budget Reconciliation Act of 1993 created two new tax brackets of 36 percent and 39.6 percent, which applied to all income in 1993, but the withholding tables reflecting these new rates were not available to employers until January 1994.

reflect changes in the provisions affecting itemized deductions or adjustments to gross income.

Differences between liabilities and payments may also arise when withholding is the taxpayer's option, as is the case for pensions and annuities; unemployment compensation; certain Federal Government payments, such as social security and tier 1 railroad retirement benefits; and sick pay from other than an employer.

Backup withholding applies to all types of non-wage income that are subject to information reporting. For example, backup withholding is required if the recipient fails to furnish an accurate taxpayer identification number to the payor or if the recipient lacks certification that the income is not subject to backup withholding (this withholding was initiated in 1984 as a compliance measure). The backup withholding system requires a payor to deduct and withhold income tax from reportable payments, such as interest or dividends, at a 31-percent rate, and it may result in overwithholding if the income is actually taxed at a lower rate.

The net result of all of these factors has been persistent overwithholding of taxes on income subject to withholding, despite an attempt to reduce overwithholding by redesigning the withholding tables in 1992.⁷

Income not subject to withholding.—For income that is not subject to withholding (such as self-employment income, capital gains, taxable social security benefits, and most interest, dividends, and pensions and annuities), liabilities differ from payments for two reasons. First, the proportion of the current year's liabilities that must be paid in estimated taxes in order to avoid a penalty is less than 100 percent. Second, settlements and the last installment of quarterly estimated taxes are for liabilities that are incurred in 1 year but that are paid to the U.S. Treasury Department in the next year; refunds also are made in the year after the liabilities were incurred. (Settlements, quarterly estimated taxes, and refunds are recorded in the payments series in the calendar year in which they are received or paid by the U.S. Treasury Department.) As a result, net payments of nonwithheld taxes during a year may not reflect that year's income. Therefore, nonwithheld tax payments (declarations and settlements) tend to be less than liabilities.

As noted below, overwithholding on wage and salary income tends to offset much of this shortfall, and the net difference between total payments

and total liabilities is smaller than the difference that would be expected by an examination of either withheld income taxes or nonwithheld income taxes.

In addition to the timing differences between payments and liabilities, there are measurement errors that cannot be isolated from the timing-basis differences. These errors include sampling and nonsampling errors with the *SOI* sample data, reporting and processing errors with the financial statements for the Federal Government and with employment tax return tabulations from the Social Security Administration, and estimating errors in the NIPA payments series and in the coverage adjustments made to the *SOI* data to derive the liabilities series.

Differences between liabilities and payments

BEA estimates of Federal personal income tax liabilities and the NIPA estimates of Federal personal income tax payments are derived from different source data. The BEA estimates of Federal personal income tax liabilities are derived primarily from the *SOI* estimates of total income tax, and the NIPA estimates of Federal personal income tax payments are derived primarily from the *Monthly Treasury Statement of Receipts and Outlays of the United States Government*. The most notable differences—in 1972, 1982–83, and 1986–90—usually reflect changes in tax laws.

For 1972, tax payments exceeded tax liabilities by \$8.5 billion. The excess payments primarily resulted from increases in withholding rates that were designed to eliminate widespread underwithholding. The new withholding tables effective for wages paid after January 15, 1972, resulted in overwithholding for wage earners unless they claimed one or more additional withholding allowances to offset the higher rates.⁸ However, many wage earners did not claim the additional withholding allowances, so payments greatly exceeded liabilities.

For 1982, tax payments exceeded tax liabilities by \$14.8 billion, and for 1983, by \$8.4 billion. The excess payments resulted primarily from provisions of the Economic Recovery Tax Act of 1981. The most important provision of this act was a three-stage reduction in personal income tax rates: 5 percent in October 1981, 10 percent in July 1982, and 10 percent in July 1983. Tax payments were reduced, primarily through cuts in withholding rates that were effective in October 1981, in July 1982,

7. However, much of this overwithholding may not represent overwithholding for total income taxes (that is, total payments in excess of total liabilities), because individuals may choose to withhold more from their wages in order to cover tax liabilities on income not subject to withholding.

8. The higher withholding rates were designed to result in overwithholding for wage earners who elected to take the standard deduction; overwithholding was much larger for wage earners who itemized their expenses and deductions. Overwithholding was built into withholding tables until 1991. New withholding tables introduced in 1992 largely removed the built-in overwithholding.

and in July 1983. However, these cuts were less than the reduction in liabilities, resulting in substantial excess payments, especially for 1982 and 1983.

For 1986–88, the differences resulted primarily from provisions of the Tax Reform Act of 1986 (TRA). Most of the provisions of the TRA were effective on January 1, 1987, but a few were retroactive to January 1, 1986.

For 1986, tax liabilities exceeded tax payments by \$24.8 billion. This substantial difference reflected unusually the large taxable capital gains declared in that year; these gains increased from \$68.3 billion in 1985 to \$132.8 billion in 1986, when the preferential tax treatment of long-term capital gains was repealed by the TRA. Under the TRA, capital gains were taxed at the same rate as ordinary income, but in 1987, the top rate was limited to 28 percent. Previously, long-term capital gains were taxed at only 40 percent of the ordinary income tax rates, so the top rate was 20 percent. Thus, many taxpayers accelerated realizations of capital gains into the fourth quarter of 1986. Because capital gains

are not subject to withholding, 1986 tax payments were little affected by the accelerated realizations.

For 1987, tax payments exceeded tax liabilities by \$13.8 billion. The excess payments reflected the settlements of the 1986 capital gains tax liabilities.

For 1988, tax liabilities exceeded tax payments by \$19.1 billion. The excess liabilities reflected continued increases in the incomes of partnerships and S corporations and in capital gains, for which taxes are not withheld. The large increase in the incomes of partnerships and S corporations—from \$24.3 billion in 1987 to \$57.1 billion in 1988—was affected by the TRA's phasing out of passive losses beginning in 1987.

For 1989, tax payments exceeded tax liabilities by \$11.5 billion. The excess payments partly reflected the settlement of the 1988 tax liabilities; the excess also reflected a decrease in capital gains (by \$8.1 billion) and a slowdown in the increase in the incomes of partnerships and S corporation (by \$6.0 billion), both of which limited the increase in tax liabilities. Moreover, because of the over-withholding inherent in the withholding system, tax payments tend to exceed tax liabilities when incomes not subject to withholding increase at a slow rate or decline.

For 1990, tax payments exceeded tax liabilities by \$16.8 billion. The excess payments primarily reflected a decrease in the income not subject to withholding. Taxable capital gains declined \$31.4 billion and taxable self-employment income declined \$9.9 billion as a result of a new deduction for one-half of self-employment tax owed.⁹ As in 1989, payments also exceeded liabilities largely because of a slowdown in income not subject to withholding.

For 1991–97, the differences between liabilities and payments were relatively small, despite numerous changes in the tax laws.¹⁰

Sources of revisions for 1959–96

The revisions to the annual series for liabilities and for payments for 1959–96 reflected the incorpora-

Table 2.—Revisions to Federal Personal Income Tax Liabilities and Payments, 1959–96

[Billions of dollars]

Year	Liabilities basis			Payments basis			Difference		
	Pre- viously published	Revised	Revision	Pre- viously published	Revised	Revision	Pre- viously published	Revised	Revision
1959	39.1	39.0	-0.1	38.4	38.5	0.1	0.7	0.5	-0.2
1960	39.9	39.9	0	41.7	41.8	.1	-1.8	-1.9	-.1
1961	42.7	42.7	0	42.6	42.7	.1	.1	0	-.1
1962	45.3	45.4	.1	46.4	46.5	.1	-1.1	-1.1	0
1963	48.7	48.8	.1	49.0	49.1	.1	-.3	-.3	0
1964	47.7	47.8	.1	45.8	46.0	.2	1.9	1.8	-.1
1965	50.2	50.2	0	50.9	51.1	.2	-.7	-.9	-.2
1966	56.7	56.8	.1	58.4	58.6	.2	-1.7	-1.8	-.1
1967	63.6	63.7	.1	64.1	64.4	.3	-.5	-.7	-.2
1968	77.4	77.5	.1	76.2	76.4	.2	1.2	1.1	-.1
1969	87.2	87.4	.2	91.1	91.7	.6	-3.9	-4.3	-.4
1970	84.3	84.5	.2	88.5	88.9	.4	-4.2	-4.4	-.2
1971	85.9	86.1	.2	85.3	85.8	.5	.6	.3	-.3
1972	94.2	94.3	.1	102.3	102.8	.5	-8.1	-8.5	-.4
1973	108.8	108.9	.1	109.1	109.6	.5	-.3	-.7	-.4
1974	124.5	124.4	-.1	126.0	126.5	.5	-1.5	-2.1	-.6
1975	117.3	117.3	0	120.4	120.7	.3	-3.1	-3.4	-.3
1976	142.8	142.8	0	140.8	141.2	.4	2.0	1.6	-.4
1977	161.0	161.0	0	161.8	162.2	.4	-.8	-1.2	-.4
1978	189.6	189.6	0	188.4	188.9	.5	1.2	.7	-.5
1979	216.1	216.1	0	224.0	224.6	.6	-7.9	-8.5	-.6
1980	252.2	252.3	.1	249.5	250.0	.5	2.7	2.3	-.4
1981	286.7	286.7	0	290.1	290.6	.5	-3.4	-3.9	-.5
1982	280.3	280.2	-.1	295.0	295.0	0	-14.7	-14.8	-.1
1983	278.0	277.8	-.2	286.8	286.2	-.6	-8.8	-8.4	.4
1984	307.1	306.7	-.4	301.9	301.4	-.5	5.2	5.3	.1
1985	332.9	331.5	-1.4	336.7	336.0	-.7	-3.8	-4.5	-.7
1986	375.2	374.9	-.3	350.7	350.1	-.6	24.5	24.8	.3
1987	379.6	378.7	-.9	394.1	392.5	-1.6	-14.5	-13.8	.7
1988	422.9	422.0	-.9	405.6	402.9	-2.7	17.3	19.1	1.8
1989	441.6	440.0	-1.6	453.2	451.5	-1.7	-11.6	-11.5	.1
1990	455.3	453.4	-1.9	472.7	470.2	-2.5	-17.4	-16.8	.6
1991	457.1	455.4	-1.7	464.4	461.3	-3.1	-7.3	-5.9	1.4
1992	484.5	483.1	-1.4	478.1	475.3	-2.8	6.4	7.8	1.4
1993	509.5	508.5	-1.0	508.1	505.4	-2.7	1.4	3.1	1.7
1994	540.4	540.3	-.1	545.3	542.5	-2.8	-4.9	-2.2	2.7
1995	594.0	592.9	-1.1	589.0	585.6	-3.4	5.0	7.3	2.3
1996	665.8	664.5	-1.3	666.9	662.9	-4.0	-1.1	1.6	2.7


9. Beginning with 1990, if a taxpayer had income from self-employment and owed self-employment tax, the taxpayer was allowed to deduct one-half of that tax. The deduction was entered on Form 1040 as an adjustment to total income.

10. The following major tax law changes affected liabilities during this period: The decrease in the maximum tax rate on net long-term capital gains from 28 percent for 1991 to 20 percent for 1997; the increase in the maximum tax rate on other types of income from 31 percent for 1991 to 39.6 percent for 1997; the increase in the maximum earned income tax credit from \$1,192 for one qualifying child for 1991 to \$2,210 for 1997; the phaseout of certain itemized deductions beginning with 1991; and the taxation of up to 85 percent of social security and equivalent tier 1 railroad retirement benefits beginning with 1994. Tax payments were changed to reflect liabilities changes by the introduction of new withholding tables and by changes in the minimum estimated tax payments requirements. As noted in footnote 8, new withholding tables introduced in 1992 largely removed the built-in overwithholding that was present in the tables since 1972.

tion of definitional and statistical changes made in the comprehensive revision of the NIPA's that was released in October 1999 and the incorporation of updated *SOI* estimates of total income from the *Statistics of Income Bulletin* (table 2).¹¹

The definitional changes to the NIPA payments series include the reclassifications of several Federal tax and contributions items. The refunds under the Federal Insurance Contribution Act (FICA) were reclassified as offsets against contributions for social insurance; previously, the FICA refunds were treated as offsets against personal income taxes. Penalties related to estimated taxes and to individual retirement plans were reclassified as personal nontaxes, and the excise taxes related to private pension plans were reclassified as business

nontaxes; previously, those penalties and excise taxes were treated as personal income taxes. These definitional changes were also made to the BEA liabilities series, so the differences between the two series were unaffected.¹²

Several statistical changes were incorporated into the liabilities series, beginning with 1959, and into the payments series, beginning with 1988.¹³ Because the net amounts of statistical changes to the annual estimates of liabilities and of payments were small, revisions to the differences were also small. 

11. For details about the definitional changes for Federal Government taxes, see Moulton, Parker, and Seskin, "Definitional and Classification Changes,"¹⁵ For *SOI* data, see Internal Revenue Service, *Statistics of Income Bulletin* (Washington, DC: U.S. Government Printing Office, Spring 1999).

12. Previously, the items reclassified in the definitional changes were part of the adjustments made to *SOI* estimates of total income tax in the derivation of the liabilities series; these adjustments were made in order to make the coverage of the liabilities series comparable with that of the payments series.

13. Statistical changes to the liabilities series included the incorporation of newly available source data on additional assessments from audits and revised source data for income taxes paid by U.S. citizens living abroad for 1 year or more. Statistical changes to the payments series included the incorporation of revised source data for interest paid on late taxes and for taxes paid by U.S. citizens living abroad for 1 year or more.